## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

| Application Serial Number: | _/0/56/,372 |
|----------------------------|-------------|
| Source:                    | IFWP        |
| Date Processed by STIC:    | 12/29/05    |
|                            |             |

## ENTERED



IFW O

DATE: 12/29/2005 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/561,372 TIME: 15:01:35

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- 42 <212> TYPE: DNA
- 43 <213> ORGANISM: Homo sapiens

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57 tccagagcaa atcaaatata tattggccca gtacaacact accaaggaca aggcgttcac

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720

780

Input Set : A:\Avalon 258.txt

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|     |              | accagcgtga   |              |            |              |              | 960  |
|     |              | tcaagtgaaa   |              |            |              |              | 1020 |
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|     |              | gatttggatg   |              |            |              |              | 1140 |
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|     |              | gatatcgaca   |              |            |              |              | 1260 |
|     |              | tatgttaata   |              |            |              |              | 1320 |
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| 69  | cgtgattttt   | tactacctgg   | gcttactgtg   | tggcgtgtgc | ggctatgaca   | ggcatgccac   | 1440 |
| 70  | cccgaccacc   | cgaggctgtg   | tctccaacac   | cggaggcgtc | ttcctcatgg   | ttggagttgg   | 1500 |
| 71  | attaagtttc   | ctcttttgct   | ggatattgat   | gatcattgtg | gttcttacct   | ttgtctttgg   | 1560 |
| 72  | tgcaaatgtg   | gaaaaactga   | tctgtgaacc   | ttacacgagc | aaggaattat   | tccgggtttt   | 1620 |
|     |              | tacttactaa   |              |            |              |              | 1680 |
|     |              | atgaagctca   |              |            |              |              | 1740 |
|     |              | actcttcacc   |              |            |              |              | 1800 |
|     |              | ggaagcataa   |              |            |              |              | 1860 |
|     |              | gcagcaggaa   |              |            |              |              | 1920 |
|     |              | gacagctact   | -            |            |              |              | 1980 |
|     | _            | tatgatctag   |              |            |              |              | 2040 |
|     |              | agagatgcac   |              |            |              |              | 2100 |
|     | _            | ctgagcactc   |              |            |              |              | 2160 |
|     | _            | agagtaacta   |              |            |              |              | 2220 |
|     |              | tcctctgtta   |              |            |              |              | 2280 |
|     |              | cattatctgc   |              |            |              |              | 2340 |
|     |              | gccaccgctc   |              |            |              |              | 2400 |
|     |              |              |              |            |              |              | 2460 |
|     |              | aatttgtttt   |              |            |              |              | 2520 |
|     |              | gcggtaaaac   |              |            |              |              | 2520 |
|     |              | gaaactatac   |              |            |              |              |      |
|     |              | tatggtattc   |              |            |              |              | 2640 |
|     |              | ctgcttgagc   |              |            |              |              | 2700 |
|     |              | tctacaagga   |              |            |              |              | 2760 |
|     |              | caccaaggca   |              |            |              |              | 2820 |
|     |              | tatagtccat   |              |            |              |              | 2880 |
|     | _            | ttttactttt   |              |            | _            |              | 2940 |
|     |              | attggatgca   |              |            | _            |              | 3000 |
|     |              | atgtgtggag   |              |            |              |              | 3060 |
|     |              | aacggtgtat   |              |            |              |              | 3120 |
|     |              | ttcttctaaa   |              |            |              |              | 3180 |
|     |              | ttttcactaa   |              |            |              |              | 3240 |
| 100 | ) ttcatctatt | t atactttato | c aaagattggc | catgttccac | : ttggaaatgg | g catgcaaaag | 3300 |
| 10: | l ccatcataga | a gaaacctgc  | g taactccatc | tgacaaatto | : aaaagagaga | a gagagatctt | 3360 |
| 102 | 2 gagagagaa  | a tgctgttcgt | tcaaaagtgg   | agttgtttta | acagatgcca   | a attacggtgt | 3420 |
| 103 | 3 acagtttaac | c agagttttct | gttgcattag   | gataaacatt | aattggagt    | g cagctaacat | 3480 |
|     | _            |              |              |            |              | cctgtcacaa   | 3540 |
|     | -            |              |              |            |              | a aatttgcatg | 3600 |
|     |              |              |              |            |              | g tcattatcaa | 3660 |
|     |              |              |              |            |              | tggaattcca   | 3720 |
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Input Set : A:\Avalon 258.txt

|   | gatgtaggca ttccccccag<br>aaaaaggaac ttgg   | gtcttttcat   | gtgcagattg   | cagttctgat   | tcatttgaat   | 3780<br>3794   |
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|   | acggccggac gcggccatgg  |  |  |  |  | 120  |
|   | cttcctgtgc ctgagtgggc  |  |  |  |  | 180  |
|   | gccctgggg aagacagccg   |  |  |  |  | 240  |
|   | cgcctggag tggagctttg   |  |  |  |  | 300  |
|   | gtacttcacc aatggccatc  |  |  |  |  | 360  |
|   | tcagaacccc cccacagtgg  |  |  |  |  | 420  |
|   | tactggaacc tacctctgcc  |  |  |  |  | 480  |
|   | gctaatcaac cttactgtgc  |  |  |  |  | 540  |
|   | aacctctgtg ggaggctcta  |  |  |  |  | 600  |
|   | agtgtacaac tgggtgcgtc  |  |  |  |  | 660  |
|   | agatgaggtg tctggccagc  |  |  |  |  | 720  |
|   | ccgctgtgtg gccaccaacc  |  |  |  |  | 780  |
|   | cgaaccetee caaggeegag  |  |  |  |  | 840  |
|   | gctgtcagtt gctgcgttct  |  |  |  |  | 900  |
|   | ggagacatat gggggtagtg  |  |  |  |  | 960  |
|   | cacttgtatg agggctgatt  |  |  |  |  | 1020   |
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| 146   | catttgctac tgtagatatt  | caggatgact   | gtggaatcac   | tgatgaacct   | caaataaatt   | 120  |
| 147   | tgaagagaag tcaagaaaat  | gaatgggtca   | agagtgatca   | agtaaagaag   | aggaaaaaaa   | 180  |
|   | agagaaaaga ttatcaaccc  |  |  |  |  | 240  |
|   | taaaaggaat taagatcctg  | _  | taatacaaca   | agatgagcga   | ctggccaaag   | 300  |
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| 151   | caatggtcag tgatggttcc  |  |  | gatgcaatta   | ttaaatgaag   | 360  |
|   | atgaagtaaa cattggtatt  | gatgctcttt   | tggaattgaa   | gatgcaatta<br>accattcata   | ttaaatgaag<br>gaagaactcc   | 420  |
| 152   | atgaagtaaa cattggtatt<br>tccagggaaa acatttgact   | gatgctcttt<br>ttgccctttc   | tggaattgaa<br>aagggattgg   | gatgcaatta<br>accattcata<br>tacttttgga   | ttaaatgaag<br>gaagaactcc<br>aatcaggttg   | 420<br>480   |
| 152<br>153  | atgaagtaaa cattggtatt<br>tccagggaaa acatttgact<br>gatttgtgaa gctggcagaa  | gatgctcttt<br>ttgccctttc<br>ggagatcatg   | tggaattgaa<br>aagggattgg<br>taaactcact   | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata   | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg   | 420<br>480<br>540  |
| 152<br>153<br>154   | atgaagtaaa cattggtatt<br>tccagggaaa acatttgact<br>gatttgtgaa gctggcagaa<br>caaataggac atttcaagaa   | gatgctcttt<br>ttgccctttc<br>ggagatcatg<br>aaaggcatcc   | tggaattgaa<br>aagggattgg<br>taaactcact<br>tggtaggaga   | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata<br>gagcagaagt   | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg<br>tttaaacctc   | 420<br>480<br>540<br>600   |
| 152<br>153<br>154<br>155                                    | atgaagtaaa cattggtatt<br>tccagggaaa acatttgact<br>gatttgtgaa gctggcagaa<br>caaataggac atttcaagaa<br>atttgacctt catgaagttg  | gatgetettt<br>ttgeeettte<br>ggagateatg<br>aaaggeatee<br>tcaaaateae   | tggaattgaa<br>aagggattgg<br>taaactcact<br>tggtaggaga<br>cgtggctccg   | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata<br>gagcagaagt<br>taagaatgga   | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg<br>tttaaacctc<br>gtgaaaaaaa   | 420<br>480<br>540<br>600<br>660  |
| 152<br>153<br>154<br>155<br>156                             | atgaagtaaa cattggtatt<br>tccagggaaa acatttgact<br>gatttgtgaa gctggcagaa<br>caaataggac atttcaagaa<br>atttgacctt catgaagttg<br>tagatcctga tttatatgaa   | gatgctcttt<br>ttgccctttc<br>ggagatcatg<br>aaaggcatcc<br>tcaaaatcac<br>aagtttatca   | tggaattgaa<br>aagggattgg<br>taaactcact<br>tggtaggaga<br>cgtggctccg<br>gtcacagatt   | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata<br>gagcagaagt<br>taagaatgga<br>tggagaagaa   | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg<br>tttaaacctc<br>gtgaaaaaaa<br>atattatatc   | 420<br>480<br>540<br>600<br>660<br>720                                     |
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| 152<br>153<br>154<br>155<br>156<br>157<br>158<br>159        | atgaagtaaa cattggtatt tccagggaaa acatttgact gatttgtgaa gctggcagaa caaataggac atttcaagaa atttgacctt catgaagttg tagatcctga tttatatgaa gcatagatct ttgctccatg cttccattgt gattggtgaa tcagtaagag gctggtggag  | gatgctcttt<br>ttgccctttc<br>ggagatcatg<br>aaaggcatcc<br>tcaaaatcac<br>aagtttatca<br>ctgaagaaaa<br>aagaacggag<br>aacgcggtgc               | tggaattgaa aagggattgg taaactcact tggtaggaga cgtggctccg gtcacagatt aacaaagtaa gggagcccga tcaaggctgt                       | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata<br>gagcagaagt<br>taagaatgga<br>tggagaagaa<br>tggttattat<br>tgacgctgaa<br>ccagcagtat                             | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg<br>tttaaacctc<br>gtgaaaaaaa<br>atattatatc<br>cactgtgaat<br>ctagtaaggc<br>ctggaggaaa                             | 420<br>480<br>540<br>600<br>660<br>720<br>780<br>840<br>900                |
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| 152<br>153<br>154<br>155<br>156<br>157<br>158<br>159<br>160 | atgaagtaaa cattggtatt tccagggaaa acatttgact gatttgtgaa gctggcagaa caaataggac atttcaagaa atttgacctt catgaagttg tagatcctga tttatatgaa gcatagatct ttgctccatg cttccattgt gattggtgaa tcagtaagag gctggtggag cacagaataa aaacaagccg  | gatgctcttt ttgccctttc ggagatcatg aaaggcatcc tcaaaatcac aagtttatca ctgaagaaaa aagaacggag aacgcggtgc ggggagggga                            | tggaattgaa aagggattgg taaactcact tggtaggaga cgtggctccg gtcacagatt aacaaagtaa gggagcccga tcaaggctgt gctctgtgaa gagcccggaa | gatgcaatta<br>accattcata<br>tacttttgga<br>tttggagata<br>gagcagaagt<br>taagaatgga<br>tggagaagaa<br>tggttattat<br>tgacgctgaa<br>ccagcagtat<br>aaccgaagca<br>cgcaggcccc | ttaaatgaag<br>gaagaactcc<br>aatcaggttg<br>gcagagactg<br>tttaaacctc<br>gtgaaaaaaa<br>atattatatc<br>cactgtgaat<br>ctagtaaggc<br>ctggaggaaa<br>gctgatcaga<br>catgtctctg | 420<br>480<br>540<br>600<br>660<br>720<br>780<br>840<br>900<br>960         |

Input Set : A:\Avalon 258.txt

| 164 tcgcattgct gaaacacaac agaagaaaa ttggctaat acttttcatg atggttgtg 164 tcgcattgct gaaacacaac agaagaaaaa tggagtgtg ggactggcag aggaaataa 120 165 ttgatgaaag aagaatggc caagtttcat tcgccctcag ccacgcacaa gggaaaggg 166 actttgggtt atgcctcctg gacgcaaatt aaaggccgag aaagaggcc tgcatcaat 167 ggaaactgc acttatatatt gcttagcag gcatttgact acttatctg tgccatcaat 168 tctcacacac agctatcaag tgctaagtt aaaataatca ctgttggaat tgccatcat 169 acaattagtc cataattatt gcttagcag gcatttgact acttatcttg aggcagaac 160 acttttatat gaaattagt ttcatgtaa aaataatca ctgttggaat tgcaacctt 170 tttattata gtaaattagt tttcatgtaa atgatatatt tttggtgaaa tgcaaccttt 171 tctataaaat gtgggcaaca ttttaaaagt tttttatat ttttttt tt taggcaag aacctattgg 172 tgccatatt aatgaaattg tattataa ttttttttt tt taggcaag aacctattgg 173 aattcggagac ttaattaaatg aagctttgca tcgagaacag atgggtctga agtcaagact 174 ttagaagga agacttatta acaaccagtaa tcagaaaat gacggtgat tcagacaacc 175 tttgaagga agacttatta acaaccagtaa ttcagcaaat gacgttgat tcagcacaac 176 tttgaagga agacttatta acaaccagtaa ttcagcaaat gacgttgat tcagcacaac 177 ttaagtagct ctttggtaaa caccaaagaa gtttctgaa gggttggat tcagcacaac 178 caacatttgg tgaggaatta gcaatttctt gccaaagaa gtgtgtgac acaacaacag 178 caacatttgg tgaggaatta gcaatttctt gccaaagaa gtgtctgaa gacaacacac 178 tttgagcac accttgtgt ttagaatac tgtttctgaa gtgtctgaa gaaaaaacac 179 ttttgagcta cacttgtgt ttagaatac tgtttctgaa gtgtctgaa gaaaaaacac 179 ttttgagcta cacttgtgt tttagaatac tgttctgaa gtgtcttgaa gaaaaaacac 170 gaaatggtt acaacttct tgttgaaga acaaacacag gataacaaca gtgtcttaac 170 gaaatggtt acaaatcat tcacaaacag aataaaacaa gacacaacaa gtatttaa 170 gaaacgtgt aacaatcat tcacaaacag acaacaaca gtacacaaca gtattttaa 170 gaaactgtg acaaatcat tcacaaacag acaacaaca gtattttaa 170 gaaacagtg acaaatcat tttaaagaa attagaacat ttattaacacat 170 gaaacagtg gaacattat ttaaaagac ttaaacaacag acaacaaca gtattataa 170 gaaacagtg gaacaacaacacacacaacaacaacaacaacaacaacaac   |
|--|
| 165 ttgatgaaag aagaatggcc caagttcat tcgcctcag ccacgcacaa gggaaaggga 1260 166 actttgggtt atgcctcctg gacgcaaat aaaggccgag caagtactact tgccatcaat 1320 167 ggaaatctgc cattatatt gcttagcag gcatttgact actttactg aggccagaac 1380 168 tctcacacac agctatcaag tgctaagtt aaaataatca ctgttggaat tgccactgt 1440 169 acaattagtc cataatgtt catgtttgtc ctaagtgtg tgttgctatg caggtggatc 1500 170 tttattaaa gtaaattatg tttcatgtaa atgatatatt ttggtggaaa tgcaacactt 1560 171 tctataaaat gtgggcaaca ttttaata tttttttt tttggtgaaa tagaccattg 1680 172 tgccatatt aatgaaatgt tattaataa tttttttt tttagcaaga aactattgg 1680 173 aattcgagac ttaattaatg aagcttgca tcgagaacga atgggtctga agtccaaagt 1740 174 gaaacagata aaggaacttt tattaaagc tgagactcag gccagaatta ggagggagct 1770 175 tttgaagga agacttata acaacagtaa ttcagcaaat gacgttgat ttcagcacac 1860 176 tttgaagga gacttatta acaacagtaa ttcagcaaat gacgttgat ttcagcacac 1860 177 ttaagtagct ctttggtaaa caccaaagaa gtttctgat gtgtctgcac aacagcaaac 1790 178 taagtagct cttttggtaaa caccaaagaa gtttctgat gtgtctgcac aacagcaaac 1790 179 tttgagcta cacttgtgtt ttagaatatc tgtttctgta gtgtctgcac aacagcaaac 1790 170 ttttgagcta cacttgtgtt ttagaatatc tgtttctgta atattgagag ttatttata 200 171 tttgagcta cacttgtgtt ttagaatatc tgtttctgta atattgatctg 200 179 ttttgagcta cacttgtgtt ttagaatatc tgtttctgta atattgagag ttattttata 2100 170 gaaatgattt cttaattagc tgttgtgaga tatttctcgg gtccttgcag aaaaaacac 1260 171 tagagtagct cttcctgttg acacaattgt tgctaaatca aaagaaggt tgtccaggtg 2280 172 tgcaattt tattaaga atttgagaga tattttaa 2220 173 tggggtcattg cctcctgttg acacaattgt tgctaaatca aaagaaggt tgtccaggtg 2280 174 ttttgagcta cctcctgttg acacaattgt tgctaaatca aaagaaggt tgtccaggtg 2280 175 tagagacatt tattaaagga atttgagaga atttttaa 2220 177 tagagactgt gacaaacaac ttcacaaaga aatagacac aaagaaacat 2220 178 tgcaattgt tggtaacaaca cactattgt tgctaaaaca aaaaaaaaga gtttctaag gagatgttta 2220 179 tgcaattgt tggtaaacaac ttttcataaga atttgaatgt tattcaaga ataggtctca 2230 170 tgcaattgt tggtaacaaca aacaattgt ttcccttga aaaaacaca ttcccctag 2220 177 tgcaattgt tggtaacaaca aacaattgt ttcccttga aaaaaa |
| 166 actttgggtt atgectectg gacgaaatt aasgeegag aasgagget tgecateaat 1320 167 ggaatactge catttatatt gettageagg geatttgact actttatetg aggeegaac 1380 1880 1880 acaattagte cataatgtt catgittga taaatatat tgetgtgaat tgecaagtt 1440 169 acaattagte cataatgtt catgittge ctaagtgtg tgttgetatg caggtggate 1700 tttatttata gtaaattatt ttteatgtaa atgaatatatt tttggtgaaa tgecaagtg 1500 170 tttatttata gtaaattatt ttteatgtaa atgaatatatt tttggtgaaa tgecaagt 1620 171 tectataaaat gtgggeacattata atgaaatgt ttttaaaat cetatttga taagteaga 1620 172 tgecatattt aatgaaatgt tattaataa ttttttte tttaggeaaga aacetattgg 1680 173 aattegagae ttaattaatg aagettgea tegagaacag atgggtetga agtecaaagt 1740 174 taagaaaga aggaettata acaacagtaa tteagaaatg aggggaggaggt 1800 175 ttttgaagga aggeettatta acaacagtaa tteageaaat gacgttgat teagagaaaga 1740 175 ttttgaagga aggeettatta acaacagaa tteegaaat gacgttgat teagagaaaga 1770 175 ttttgaagga aggeettatta acaacagaa tteegaaat gacgttgat teagagaaaga 1770 175 ttttgaagga tettegggagaatta geaattett gegattgtga caacataget tatgaaatet ttttaagagag 1770 175 ttttgageta aggeaatta geaattett geeaattett geeaaagaa gtttetgaa gatgtetgaa aacagaaaga 1780 1770 1770 1770 1770 1770 1770 1770   |
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Input Set : A:\Avalon 258.txt

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VERIFICATION SUMMARY

DATE: 12/29/2005

PATENT APPLICATION: US/10/561,372

TIME: 15:01:36

Input Set : A:\Avalon 258.txt

Output Set: N:\CRF4\12292005\J561372.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date